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08/903898

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/903,898	07/31/97	ANDERSON	P127/JAS-737

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EXAMINER	
WILSON,J	

ART UNIT	PAPER NUMBER
2712	14

DATE MAILED: 03/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

1- File Copy

Office Action Summary

Application No.	Applicant(s)
08/903,898	Anderson et al.
Examiner	**Group Art Unit**
Jacqueline Wilson	2712

☒ Responsive to communication(s) filed on *Jan 4, 2000*

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *three* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-18 and 20-38* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-18 and 20-38* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/04/00 have been fully considered but they are not persuasive.

The applicant argues that the prior art fails to teach the preamble of Claim 34 stating "a digital camera capable of displaying an image...". The examiner disagrees. This limitation is written broadly enough that the prior art is able to read on the claims. Paralski I teaches a digital camera which has the capability of displaying images on a monitor of the computer (34) by way of a cable (col. 3, lines 54-59). Although the applicant's invention has the display located directly on the camera, the prior art meets the *claimed* invention.

On page 6 of applicants amendment, the applicant states that the first orientation of the image is based on an orientation of the digital camera at the time the image is captured. Parulski I teaches this fact on col. 3, line 60- col. 4, line 4. Parulski I teaches that the camera may capture an image in landscape mode, portrait mode, or even upside down. Each captured image is determined by the orientation determination section (36) the orientation of the camera relative to the subject, whether it being a first or a second orientation. Furthermore, the images are displayed horizontally (col. 4, lines 20+). This is equal to the landscape mode being the second orientation and all other modes being the first orientation. The processor (22) rotates the images to a horizontal position based on the dimensions of the image. This is equal to comparing the

vertical images with the horizontal image since the horizontal images are actually being displayed. Also on page 6, the applicant argues that Parulski I fails to teach displaying an image captured by the digital camera in the proper orientation on the display of the digital camera. Claim 34 does not teach this limitation. It is also noted that it is notoriously well known in the art that digital cameras has a display located directly on the camera. The examiner believes that the claims are written broadly enough that the prior art is able to read on the claimed invention. The rejections of claims 1-35 are maintained. The discussions of the newly added claims 36-38 are analyzed and discussed below.

Specification

2. The disclosure is objected to because of the following informalities:

Page 1, line 4, "U.S. Serial No. _____" should be complete with a serial number;

page 7, line 17, "serial no. _____" should also be complete with a serial number.

These serial numbers located on **page 1, line 4** and **page 7, line 17** need to be complete. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 26 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation **"a second buffer"**. There is insufficient antecedent basis for this limitation in the claim.

The applicant claims a second buffer, but fails to claim or suggest a first buffer. This makes the claim vague and indefinite.

Claim 38 recites the limitation "on the display of the digital camera". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. Claims 34 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Parulski et al. (U.S. 5,900,909).

Regarding Claims 34 and 35, Parulski et al.'909 teaches providing a first orientation associated with the previous image (See fig. 5 ; fig. 8 explains the image being input into a RAM 52 via line 50), means for capturing the image (fig. 2, 12 and 16), means for determining a second orientation associated with the camera (an orientation signal input into the memory controller via line 54) wherein the second orientation is capable of being different from the first orientation, means coupled with the determining means for comparing the first orientation and the second orientation (see fig. 5 and 8; col. 5, lines 40-65), and means coupled with the determining means for rotating the image from the first orientation to the second orientation is the first is different from the second (processor 22). The corrected images are inherently compressed and are then stored on a memory card (24) in proper orientation, which is then transferred to a computer system (28) for decompression for viewing on the CRT display (34). Parulski et al.'909 teaches that camera can be tethered to the computer by an interface cable (not shown) so that the images can be downloaded and displayed. Since the memory card (24) would be transferred to the computer for displaying, the interface cable would have used instead to couple the display via the computer with the camera.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-7, 9-10, 14-16, 18, 20-27, 29-30 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (U.S. 5,900,909) and Uekane et al. (U.S. 5,559,554).

Regarding Claim 1, Parulski et al.'909 teaches providing a first orientation associated with the previous image and storing the image (col. 5, lines 56+) including storing the information relating to the first orientation (see figs. 4 and 6) associated with the image (See fig. 5 ; fig. 8 explains the image being input into a RAM 52 via line 50), providing a second orientation associated with the image capture unit (an orientation signal input into the memory controller via line 54)whereas the second orientation is capable of being different from the first orientation, and determining whether the first orientation is different from the second orientation (col. 5, lines 45-65). The corrected images are then stored on a memory card (26) or stored a solid-state memory to be downloaded and displayed (col. 3, lines 54+) in proper orientation, which is then transferred to a computer system (28) for decompression for viewing on the CRT display (34). However, Parulski et al.'909 fails to specifically disclose the display is on the camera. Uekane et al. '554 teaches capturing images and displaying them on a monitor screen (6). By having the display on the camera would be advantageous for giving the user the opportunity to view images instantly instead of having to provide a computer for viewing the images. Since cameras with displays are notoriously well known in the art, it would have been obvious to combine Parulski et al.'909 with

Uekane et al. '554 for the purpose of easily obtaining the images. Therefore, it would have been obvious to one having ordinary skill in the to have the display included in the camera.

Claim 2 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Regarding Claims 3 and 4, Parulski et al.'909 teaches that the first orientation may be either a landscape orientation or a portrait orientation (fig. 4; col. 5, lines 45-48).

Regarding Claim 5, Parulski et al.'909 teaches that the second orientation is an orientation in which a horizontal axis of the image capture unit is substantially parallel to a surface of the earth (see fig. 1; col. 3, lines 60-65).

Regarding Claim 6, Parulski et al.'909 teaches that the camera may capture images in portrait mode, but fails to specifically disclose the second orientation, as discussed in Claim 1, is an orientation in which a horizontal axis of the image capture unit is substantially perpendicular to a surface of the earth. However, it would have been obvious to use this method in the same manner as discussed in Claim 5 if the user, for example chooses to view the images in the portrait mode when the majority of the images taken are captured in this manner. This provides the user to easily view the images with the additional rotation of the images that were captured in landscape to be view without the hassle of rotating the camera or rotating the viewer. Therefore, it would have been obvious to one having ordinary skill in the art to have the second orientation to be an orientation in which a horizontal axis of the image capture unit is substantially perpendicular to a surface of the earth, similar to the discussion in Claim 5.

Regarding Claim 7, Parulski et al.'909 teaches that the images that were reoriented to obtain a portrait-lie effect may have border areas (col. 6, lines 10-14). This teaches that the image must be resized to fit the display since there will be areas which are not associated with the image.

Regarding Claim 9, Parulski et al.'909 teaches data related to the image is stored in a buffer in a manner which allows the image to be displayed in the second orientation (referred to as RAM 52; col. 4, lines 53+).

Regarding Claim 10, Parulski et al.'909 teaches that reorienting the aspect ratio of the image may include border areas (col. 6, lines 10-15).

Regarding Claims 14 and 15, Parulski et al.'909 teaches the data associated with the image is stored in a first buffer (referred to as a RAM; fig. 8, 52), and is also stored in a second buffer (referred to as PCMCIA memory card; fig. 2, 24). Parulski et al.'909 further teaches that the memory card may be replaced with a solid-state memory fixed inside the camera as an alternative (col. 3, lines 54-56).

Regarding Claim 16, Parulski et al.'909 fails to disclose displaying text in the second orientation. However, Uekane et al. '554 teaches displaying text on the monitor in the second orientation (see fig. 12; 19-21). By having text on the display gives the user an indication of various information associated with the image captured, such as date, low battery, and operation indications. This is advantageous for the user to give them more information about the images being taken and also the status of the camera. Therefore, it would have bee obvious to one having ordinary skill in the art to display text in the second orientation.

Claim 18 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 20 is analyzed and discussed with respect to Claim 3. (See rejection of Claim 3 above.)

Claim 21 is analyzed and discussed with respect to Claim 4. (See rejection of Claim 4 above.)

Claim 22 is analyzed and discussed with respect to Claim 5. (See rejection of Claim 5 above.)

Claim 23 is analyzed and discussed with respect to Claim 6. (See rejection of Claim 6 above.)

Regarding Claim 24, Parulski et al.'909 teaches an orientation sensor fro determining the second orientation associated with the image capture unit (fig. 2, 40).

Claim 25 is analyzed and discussed with respect to Claim 14. (See rejection of Claim 14 above.)

Claim 26 is analyzed and discussed with respect to Claim 15. (See rejection of Claim 15 above.)

Claim 27 is analyzed and discussed with respect to Claim 7. (See rejection of Claim 7 above.)

Claim 29 is analyzed and discussed with respect to Claim 9. (See rejection of Claim 9 above.)

Claim 30 is analyzed and discussed with respect to Claim 10. (See rejection of Claim 10 above.)

Claim 36 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 37 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

Claim 38 is analyzed and discussed with respect to Claim 1. (See rejection of Claim 1 above.)

6. Claims 8 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (U.S. 5,900,909), Uekane et al. (U.S. 5,559,554), and in further view of Parulski et al. (U.S. 5,270,831).

Regarding Claims 8 and 28, neither Parulski et al.'909 nor Uekane et al. '554 teaches cropping the image to fit the display. However, Parulski et al.'831 discloses reorienting an image for display on a tv monitor. In col. 7, lines 27-33, Parulski et al.'831 discloses that conventional monitors employ a display screen having a 4:3 aspect ratio in which a 3:2 aspect ratio image stored in the memory will be shown. Parulski et al.'831 discloses that some degree of cropping of the image will be necessary in order to fit the image with the display. It would have been obvious to use the same method in camera with a display having a certain amount of aspect ratio to fit a reoriented image so that the viewer may see the image since the ratios will have different values.

Therefore, it would have been obvious to one having ordinary skill in the art to crop the image to fit the display.

7. Claims 11, 12, 13, 17, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (U.S. 5,900,909), Uekane et al. (U.S. 5,559,554), and in further view of Kang et al. (U.S. 5,949,408).

Regarding Claims 11, 12,13, 17 and 31-33, neither Parulski et al.'909 nor Uekane et al. '554 teaches at least one graphic, one icon, or one directional icon is displayed on the display. However, Kang et al. '408 teaches that a plurality graphics, such as icons, are displayed on a display in either a first or second orientation (figs. 3 and 4). Kang et al. '408 discloses these graphic icons on the border areas of the display in which the image may be changed from landscape mode to portrait mode (fig. 3, and 4; see elements 46 and 48). The portrait or landscape display icon (68) is a directional icon in which the user may rotate the images displayed. The purpose of having the icons present is to give the user a variety of functions with respect to the images (col. 5, lines 11-29). With Parulski et al.'909 teaching of reorienting the aspect ratio of the image may include border areas (col. 6, lines 10-15), it would have been obvious to include the teaching of Uekane et al. '554 by filling in the border areas with icons so that the user may view images and operate different functions simultaneously. Therefore, it would have been obvious to one having ordinary skill in the have at least one graphic, one icon, or one directional icon is displayed on the display.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cockell (U.S. 6,011,926)

Any inquiries concerning this communication from the examiner should be directed to **Jacqueline Wilson** whose telephone number is (703) 308-5080. The examiner can normally be reached Monday-Friday from 9:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reached at (703) 305-4929. The fax number for this group is (703) 308-6306/6296.

Any response to this action should be mailed to:

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or Faxed to:

(703) 308-9051, (for formal communication intended for entry)

or:

(703) 308-6306/6296, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

JBW

March 7, 2000

Wendy Garber
Supervisory Patent Examiner
Technology Center 2700